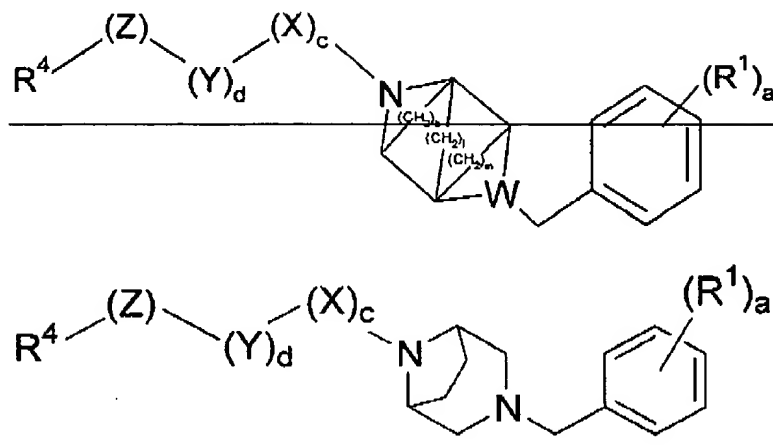


Claim Listing:

1. (Currently Amended) A compound of the formula



or a pharmaceutically acceptable salt thereof; wherein

a is 1, 2, 3, 4 or 5;

c is 0 or 1;

d is 1, 2, 3, 4 or 5;

k is 2; l is 0; m is 0;

W is N;

X is C(O), C(S) or CH₂;

Y is CH₂;

Z is oxygen, NR⁹ or CR¹¹R¹²;

each R¹ is independently selected from hydrogen, hydroxy, hydroxysulfonyl, halo, (C₁-C₆)alkyl, mercapto, mercapto(C₁-C₆)alkyl, (C₁-C₆)alkylthio, (C₁-C₆)alkylsulfinyl, (C₁-C₆)alkylsulfonyl, (C₁-C₆)alkylthio(C₁-C₆)alkyl, (C₁-C₆)alkylsulfinyl(C₁-C₆)alkyl, (C₁-C₆)alkylsulfonyl(C₁-C₆)alkyl, (C₁-C₆)alkoxy, (C₆-C₁₀)aryloxy, halo(C₁-C₆)alkyl, trifluoromethyl, formyl, formyl(C₁-C₆)alkyl, nitro, nitroso, cyano, (C₆-C₁₀)aryl(C₁-C₆)alkoxy, halo(C₁-C₆)alkoxy, trifluoromethoxy, (C₃-C₇)cycloalkyl, (C₃-C₇)cycloalkyl(C₁-C₆)alkyl, hydroxy(C₃-C₇)cycloalkyl(C₁-

C₆alkyl, (C₃-C₇)cycloalkylamino, (C₃-C₇)cycloalkylamino(C₁-C₆alkyl, ((C₃-C₇)cycloalkyl)((C₁-C₆alkyl)amino, ((C₃-C₇)cycloalkyl(C₁-C₆alkyl)amino(C₁-C₆alkyl, cyano(C₁-C₆alkyl, (C₂-C₇)alkenyl, (C₂-C₇)alkynyl, (C₆-C₁₀)aryl, (C₆-C₁₀)aryl(C₁-C₆alkyl, (C₆-C₁₀)aryl(C₂-C₆)alkenyl, hydroxy(C₁-C₆alkyl, hydroxy(C₆-C₁₀)aryl(C₁-C₆alkyl, hydroxy(C₁-C₆alkylthio(C₁-C₆alkyl, hydroxy(C₂-C₆)alkenyl, hydroxy(C₂-C₆)alkynyl, (C₁-C₆)alkoxy(C₁-C₆alkyl, (C₁-C₆)alkoxy(C₆-C₁₀)aryl(C₁-C₆alkyl, (C₆-C₁₀)aryloxy(C₁-C₆alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkoxy(C₁-C₆alkyl, amino, (C₁-C₆)alkylamino, ((C₁-C₆)alkyl)₂amino, (C₆-C₁₀)arylamino, (C₆-C₁₀)aryl(C₁-C₆)alkylamino, amino(C₁-C₆alkyl, (C₁-C₆)alkylamino(C₁-C₆alkyl, ((C₁-C₆)alkyl)₂amino(C₁-C₆alkyl, hydroxy(C₁-C₆)alkylamino(C₁-C₆alkyl, (C₆-C₁₀)arylamino(C₁-C₆alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkylamino(C₁-C₆alkyl, (C₁-C₆)alkylcarbonylamino, ((C₁-C₆)alkylcarbonyl)((C₁-C₆)alkyl)amino, (C₁-C₆)alkylcarbonylamino(C₁-C₆alkyl, ((C₁-C₆)alkylcarbonyl)((C₁-C₆)alkyl)amino(C₁-C₆alkyl, (C₁-C₆)alkoxycarbonylamino, ((C₁-C₆)alkoxycarbonyl)((C₁-C₆)alkyl)amino, (C₁-C₆)alkoxycarbonylamino(C₁-C₆alkyl, ((C₁-C₆)alkoxycarbonyl)((C₁-C₆)alkyl)amino(C₁-C₆alkyl, carboxy, (C₁-C₆)alkoxycarbonyl, (C₆-C₁₀)aryl(C₁-C₆)alkoxycarbonyl, (C₁-C₆)alkylcarbonyl, (C₁-C₆)alkylcarbonyl(C₁-C₆alkyl, (C₆-C₁₀)arylcarbonyl, (C₆-C₁₀)arylcarbonyl(C₁-C₆alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkylcarbonyl, ~~(C₆-C₁₀)aryl(C₁-C₆)alkylcarbonyl(C₁-C₆alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkylcarbonyl(C₁-C₆alkyl,~~ (C₆-C₁₀)aryl(C₁-C₆)alkylcarbonyl(C₁-C₆alkyl, carboxy(C₁-C₆alkyl, (C₁-C₆)alkoxycarbonyl(C₁-C₆alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkoxycarbonyl(C₁-C₆alkyl, (C₁-C₆)alkoxy(C₁-C₆)alkylcarbonyloxy(C₁-C₆alkyl, aminocarbonyl, (C₁-C₆)alkylaminocarbonyl, ((C₁-C₆)alkyl)₂aminocarbonyl, (C₆-C₁₀)arylamino(C₁-C₆alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkylaminocarbonyl, aminocarbonyl(C₁-C₆alkyl, (C₁-C₆)alkylaminocarbonyl(C₁-C₆alkyl, ((C₁-C₆)alkyl)₂aminocarbonyl(C₁-C₆alkyl, (C₆-C₁₀)arylamino(C₁-C₆alkyl, (C₁-C₆)alkylaminocarbonyl(C₁-C₆alkyl, amidino, guanidino, ureido, (C₁-C₆)alkylureido, ((C₁-C₆)alkyl)₂ureido, ureido(C₁-C₆alkyl, (C₁-C₆)alkylureido(C₁-C₆alkyl, ((C₁-C₆)alkyl)₂ureido(C₁-C₆alkyl, (C₂-C₉)heterocycloalkyl, (C₂-C₉)heteroaryl, (C₂-C₉)heterocycloalkyl(C₁-C₆alkyl and (C₂-C₉)heteroaryl(C₁-C₆alkyl;

R⁴ is (R⁵Q_f)(C₆-C₁₀)aryl, (R⁵Q_f)(C₃-C₁₀)cycloalkyl, (R⁵Q_f)(C₂-C₉)heteroaryl, (R⁵Q_f)(C₂-C₉)heterocycloalkyl,

wherein f is 0, 1, 2, 3, 4 or 5;

Q is (C₁-C₆)alkyl;

q is 0 or 1;

R⁵ is independently selected from: (C₂-C₉)heterocycloalkylcarbonyl, (C₂-C₉)heteroarylcarbonyl, (C₂-C₉)heteroaryl(C₁-C₆)alkylaminocarbonyl, (C₂-C₉)heteroarylaminocarbonyl, (C₂-C₉)heterocycloalkyl(C₁-C₆)alkylaminocarbonyl, (C₁-C₆)alkylsulfonylaminocarbonyl, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkylaminocarbonyl, ureido(C₁-C₆)alkylaminocarbonyl, (C₁-C₆)alkylureido(C₁-C₆)alkylaminocarbonyl, ((C₁-C₆)alkyl)₂ureido(C₁-C₆)alkylaminocarbonyl, halo(C₁-C₆)alkylaminocarbonyl, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylaminocarbonyl, hydroxy(C₁-C₆)alkylaminocarbonyl, aminosulfonyl(C₁-C₆)alkylaminocarbonyl, carboxy(C₁-C₆)alkylaminocarbonyl, (C₁-C₆)alkylaminosulfonyl(C₁-C₆)alkylaminocarbonyl, amino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylamino(C₁-C₆)alkylcarbonylamino, carboxy(C₁-C₆)alkylcarbonylamino, carboxy(C₁-C₆)alkoxycarbonylamino, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylcarbonylamino, acetylamino(C₁-C₆)alkylcarbonylamino, (acetyl)((C₁-C₆)alkyl)amino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkylcarbonylamino, cyanoguanidino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylcyanoguanidino(C₁-C₆)alkylcarbonylamino, ((C₁-C₆)alkyl)₂cyanoguanidino(C₁-C₆)alkylcarbonylamino, aminocarbonyl(C₁-C₆)alkylcarbonylamino, aminocarbonylamino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylaminocarbonylamino(C₁-C₆)alkylcarbonylamino, ((C₁-C₆)alkyl)₂aminocarbonylamino(C₁-C₆)alkylcarbonylamino, (C₂-C₉)heteroaryl(C₁-C₆)alkylcarbonylamino, (C₂-C₉)heterocycloalkyl(C₁-C₆)alkylcarbonylamino, aminosulfonyl(C₁-C₆)alkylcarbonylamino, hydroxy(C₁-C₆)alkylureido, amino(C₁-C₆)alkylureido, (C₁-C₆)alkylamino(C₁-C₆)alkylureido, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylureido, (C₂-C₉)heterocycloalkyl(C₁-C₆)alkylureido, (C₂-C₉)heteroarylureido, (C₂-C₉)heteroaryl(C₁-C₆)alkylureido, (C₁-C₆)alkylsulfonylureido, aminosulfonyl(C₁-C₆)alkylureido, aminocarbonyl(C₁-C₆)alkylureido, (C₁-C₆)alkylaminocarbonyl(C₁-C₆)alkylureido, ((C₁-C₆)alkyl)₂aminocarbonyl(C₁-C₆)alkylureido, acetylamino(C₁-C₆)alkylureido, (acetyl)((C₁-C₆)alkyl)amino(C₁-C₆)alkylureido, carboxy(C₁-C₆)alkylureido, halo(C₁-C₆)alkylsulfonylamino, amino(C₁-C₆)alkylsulfonylamino, (C₁-C₆)alkylamino(C₁-C₆)alkylsulfonylamino, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylsulfonylamino, acetylamino(C₁-C₆)alkylsulfonylamino, (acetyl)((C₁-C₆)alkyl)amino(C₁-C₆)alkylsulfonylamino, ureido(C₁-C₆)alkylsulfonylamino, (C₁-C₆)alkylureido(C₁-C₆)alkylsulfonylamino, ((C₁-

C_6 alkyl) $_2$ ureido(C_1 - C_6)alkylsulfonylamino, (C_1 - C_6)alkylsulfonylamino(C_1 - C_6)alkylsulfonylamino, cyanoguanidino(C_1 - C_6)alkylsulfonylamino, carboxy(C_1 - C_6)alkylsulfonylamino, (C_1 - C_6)alkylcyanoguanidino(C_1 - C_6)alkylsulfonylamino, ((C_1 - C_6)alkyl) $_2$ cyanoguanidino(C_1 - C_6)alkylsulfonylamino, aminocarbonyl(C_1 - C_6)alkylsulfonylamino, (C_1 - C_6)alkoxycarbonylamino(C_1 - C_6)alkylsulfonylamino, aminosulfonylaminocarbonyl, (C_1 - C_6)alkylaminosulfonylaminocarbonyl, ((C_1 - C_6)alkyl) $_2$ aminosulfonylaminocarbonyl, (C_6 - C_{10})arylsulfonyl, (C_1 - C_6)alkylaminosulfonylamino, ((C_1 - C_6)alkyl) $_2$ aminosulfonylamino, aminocarbonyl(C_1 - C_6)alkylamino(C_1 - C_6)alkylsulfonylamino, (C_2 - C_9)heterocycloalkyloxycarbonylamino(C_1 - C_6)alkylsulfonylamino, (C_2 - C_9)heteroaryloxycarbonylamino(C_1 - C_6)alkylsulfonylamino, cyanoguanidino, (C_1 - C_6)alkylcyanoguanidino, ((C_1 - C_6)alkyl) $_2$ cyanoguanidino, (C_2 - C_9)heterocycloalkylcyanoguanidino, (C_2 - C_9)heterocycloalkyl(C_1 - C_6)alkylcyanoguanidino, (C_2 - C_9)heteroaryl(C_1 - C_6)alkylcyanoguanidino, amino(C_1 - C_6)alkylcyanoguanidino, (C_1 - C_6)alkylamino(C_1 - C_6)alkylcyanoguanidino, ((C_1 - C_6)alkyl) $_2$ amino(C_1 - C_6)alkylcyanoguanidino, aminocarbonyl(C_1 - C_6)alkylcyanoguanidino, carboxy(C_1 - C_6)alkylcyanoguanidino, (C_1 - C_6)alkylaminocarbonyl(C_1 - C_6)alkylcyanoguanidino, ((C_1 - C_6)alkyl) $_2$ aminocarbonyl(C_1 - C_6)alkylcyanoguanidino, hydroxy(C_1 - C_6)alkylamino, aminocarbonyl(C_1 - C_6)alkylamino, carboxy(C_1 - C_6)alkylamino, (C_1 - C_6)alkylsulfonylamino(C_1 - C_6)alkylamino, (C_1 - C_6)alkoxycarbonylamino(C_1 - C_6)alkylamino, aminosulfonyl(C_1 - C_6)alkylamino, (C_2 - C_9)heteroaryl(C_1 - C_6)alkylamino, acetylamino(C_1 - C_6)alkylamino, (acetyl)((C_1 - C_6)alkyl)amino(C_1 - C_6)alkylamino, (C_2 - C_9)heterocycloalkyl(C_1 - C_6)alkylamino, ((C_1 - C_6)alkyl) $_2$ amino(C_1 - C_6)alkylamino, (C_1 - C_6)alkylamino(C_1 - C_6)alkylamino, (C_1 - C_6)alkoxy(C_1 - C_6)alkylamino, (C_1 - C_6)alkoxycarbonyl(C_1 - C_6)alkylamino, cyano(C_1 - C_6)alkylamino, (C_2 - C_9)heterocycloalkyloxycarbonylamino(C_1 - C_6)alkylamino, (C_2 - C_9)heteroaryloxycarbonylamino(C_1 - C_6)alkylamino, cyanoguanidino(C_1 - C_6)alkylamino, (C_1 - C_6)alkylcyanoguanidino(C_1 - C_6)alkylamino, ((C_1 - C_6)alkyl) $_2$ cyanoguanidino(C_1 - C_6)alkylamino, ureido(C_1 - C_6)alkylamino, (C_1 - C_6)alkylureido(C_1 - C_6)alkylamino, ((C_1 - C_6)alkyl) $_2$ ureido(C_1 - C_6)alkylamino, aminocarbonyloxy(C_1 - C_6)alkylamino, hydroxy(C_1 - C_6)alkylcarbonylamino, (C_1 - C_6)alkylaminocarbonyl(C_1 - C_6)alkylcarbonylamino, ((C_1 - C_6)alkyl) $_2$ aminocarbonyl(C_1 - C_6)alkylcarbonylamino, (C_1 - C_6)alkoxycarbonylamino(C_1 - C_6)alkylcarbonylamino,

aminosulfonyl(C₁-C₆)alkylcarbonylamino, hydroxy(C₁-C₆)alkylamino(C₁-C₆)alkylcarbonylamino, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylamino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylamino(C₁-C₆)alkylamino(C₁-C₆)alkylcarbonylamino, amino(C₁-C₆)alkylamino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkoxy(C₁-C₆)alkylamino(C₁-C₆)alkylcarbonylamino, (C₂-C₉)heterocycloalkyloxycarbonylamino, (C₂-C₉)heteroarylcarbonylamino(C₁-C₆)alkylcarbonylamino, (C₂-C₉)heteroarylcarbonylamino, (C₂-C₉)heterocycloalkylcarbonylamino, (C₂-C₉)heteroaryl(C₁-C₆)alkylcarbonylamino, (C₂-C₉)heterocycloalkyl(C₁-C₆)alkylcarbonylamino, (C₂-C₉)heterocycloalkylcarbonylamino(C₁-C₆)alkylcarbonylamino, cyano(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkylaminocarbonylamino, (C₁-C₆)alkoxycarbonylamino(C₁-C₆)alkylaminocarbonylamino, (C₂-C₉)heterocycloalkyloxycarbonylamino(C₁-C₆)alkylaminocarbonylamino, (C₂-C₉)heteroaryloxycarbonylamino(C₁-C₆)alkylaminocarbonylamino, ureido(C₁-C₆)alkylureido, (C₁-C₆)alkylureido(C₁-C₆)alkylureido, ((C₁-C₆)alkyl)₂ureido(C₁-C₆)alkylureido, cyanoguanidino(C₁-C₆)alkylureido, (C₂-C₉)heteroaryl(cyanoguanidino), aminosulfonyl, amino(C₁-C₆)alkylsulfonyl, (C₁-C₆)alkylamino(C₁-C₆)alkylsulfonyl, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylsulfonyl, (C₁-C₆)alkylaminosulfonyl, ((C₁-C₆)alkyl)₂aminosulfonyl, (C₂-C₉)heterocycloalkylsulfonyl, amino(C₁-C₆)alkylaminosulfonyl, (C₁-C₆)alkylamino(C₁-C₆)alkylaminosulfonyl, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylaminosulfonyl, (C₂-C₉)heteroarylaminosulfonyl, hydroxy(C₁-C₆)alkylaminosulfonyl, (C₁-C₆)alkoxy(C₁-C₆)alkylaminosulfonyl, ureido(C₁-C₆)alkylaminosulfonyl, (C₁-C₆)alkylureido(C₁-C₆)alkylaminosulfonyl, ((C₁-C₆)alkyl)₂ureido(C₁-C₆)alkylaminosulfonyl, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkylaminosulfonyl, (C₁-C₆)alkoxycarbonylamino(C₁-C₆)alkylaminosulfonyl, (C₂-C₉)heterocycloalkyloxycarbonylamino(C₁-C₆)alkylaminosulfonyl, (C₂-C₉)heteroaryloxycarbonylamino(C₁-C₆)alkylaminosulfonyl, aminocarbonyl(C₁-C₆)alkylaminosulfonyl, cyanoguanidino(C₁-C₆)alkylaminosulfonyl, (C₂-C₉)heteroarylaminosulfonyl, (C₂-C₉)heteroaryl(C₁-C₆)alkylaminosulfonyl, (C₂-C₉)heterocycloalkylaminosulfonyl, (C₁-C₆)alkylcarbonylaminosulfonyl, halo(C₁-C₆)alkylcarbonylaminosulfonyl, (C₁-C₆)alkoxycarbonylaminosulfonyl, ureidosulfonyl, (C₁-C₆)alkylureidosulfonyl, ((C₁-C₆)alkyl)₂ureidosulfonyl, hydrogen, hydroxy, hydroxysulfonyl, halo, mercapto, (C₁-C₆)alkylthio, (C₁-C₆)alkylsulfinyl, (C₁-C₆)alkylsulfonyl, carboxy(C₁-

C_6 alkylsulfonyl, (C_6-C_{10}) arylsulfonyl, (C_2-C_9) heteroarylsulfonyl, (C_1-C_6) alkoxy, hydroxy (C_1-C_6) alkoxy, (C_6-C_{10}) aryloxy, trifluoro (C_1-C_6) alkyl, formyl, nitro, nitroso, cyano, halo (C_1-C_6) alkoxy, trifluoro (C_1-C_6) alkoxy, amino (C_1-C_6) alkoxy, (C_3-C_{10}) cycloalkylhydroxy (C_3-C_{10}) cycloalkyl (C_3-C_{10}) cycloalkylamino (C_2-C_6) alkenyl, (C_2-C_6) alkynyl, (C_6-C_{10}) aryl, (C_6-C_{10}) aryl (C_2-C_6) alkenyl, hydroxy (C_6-C_{10}) aryl, $((C_1-C_6)$ alkylamino) (C_6-C_{10}) aryl, hydroxy (C_1-C_6) alkylthio, hydroxy (C_2-C_6) alkenyl, hydroxy (C_2-C_6) alkynyl, (C_1-C_6) alkoxy (C_6-C_{10}) aryl, (C_6-C_{10}) aryl (C_1-C_6) alkoxy, amino, (C_1-C_6) alkylamino, $((C_1-C_6)$ alkyl) $_2$ amino, (C_6-C_{10}) arylamino, (C_6-C_{10}) aryl (C_1-C_6) alkylamino, amino (C_1-C_6) alkylamino, (C_2-C_9) heterocycloalkylamino, (C_2-C_9) heteroarylamino, (C_2-C_9) heterocycloalkyl (C_1-C_6) alkylamino, (C_3-C_{10}) cycloalkyl $((C_1-C_6)$ alkyl)amino, (C_1-C_6) alkylcarbonylamino, (C_1-C_6) alkoxycarbonylamino, (C_2-C_6) alkenylcarbonylamino, (C_3-C_{10}) cycloalkylcarbonylamino, (C_6-C_{10}) arylcarbonylamino, (C_2-C_9) heterocycloalkylcarbonylamino, (C_2-C_9) heteroaryloxycarbonylamino, (C_2-C_9) heterocycloalkoxycarbonylamino, halo (C_1-C_6) alkylcarbonylamino, (C_1-C_6) alkoxy (C_1-C_6) alkylcarbonylamino, (C_1-C_6) alkoxycarbonyl (C_1-C_6) alkylcarbonylamino, $((C_1-C_6)$ alkylcarbonyl) $((C_1-C_6)$ alkyl)amino, $((C_1-C_6)$ alkoxycarbonyl) $((C_1-C_6)$ alkyl)amino, (C_1-C_6) alkylsulfonylamino, $((C_1-C_6)$ alkylcarbonyl) $((C_1-C_6)$ alkyl)amino, (C_3-C_{10}) cycloalkyl $((C_1-C_6)$ alkyl)amino, $((C_1-C_6)$ alkylsulfonyl) $((C_1-C_6)$ alkyl)amino, (C_2-C_9) heteroarylsulfonylamino, (C_6-C_{10}) arylsulfonylamino, $((C_6-C_{10})$ arylsulfonyl) $((C_1-C_6)$ alkyl)amino, carboxy, (C_1-C_6) alkoxycarbonyl, (C_6-C_{10}) aryl (C_1-C_6) alkoxycarbonyl, (C_1-C_6) alkylcarbonyl, carboxy (C_1-C_6) alkylcarbonyl, amino (C_1-C_6) alkylcarbonyl, (C_1-C_6) alkylamino (C_1-C_6) alkylcarbonyl, $((C_1-C_6)$ alkyl) $_2$ amino (C_1-C_6) alkylcarbonyl, (C_6-C_{10}) arylcarbonyl, (C_2-C_9) heteroaryl (C_1-C_6) alkylcarbonyl, (C_6-C_{10}) aryl (C_1-C_6) alkylcarbonyl, hydroxy (C_1-C_6) alkoxycarbonyl, (C_1-C_6) alkoxy (C_1-C_6) alkylcarbonyloxy, $((C_1-C_6)$ alkyl) $_2$ aminocarbonyloxyaminocarbonyl, hydroxyaminocarbonyl, (C_1-C_6) alkylaminocarbonyl, $((C_1-C_6)$ alkyl) $_2$ aminocarbonyl, (C_6-C_{10}) arylaminocarbonyl, (C_6-C_{10}) aryl (C_1-C_6) alkylaminocarbonyl, aminocarbonyl (C_1-C_6) alkylaminocarbonyl, (C_1-C_6) alkylaminocarbonyl (C_1-C_6) alkylaminocarbonyl, (carboxy (C_1-C_6) alkyl)aminocarbonyl, (C_1-C_6) alkoxycarbonyl (C_1-C_6) alkylaminocarbonyl, (amino (C_1-C_6) alkyl)aminocarbonyl, hydroxy (C_1-C_6) alkylaminocarbonylamidino, hydroxyamidino, guanidino, ureido, (C_1-C_6) alkylureido, (C_6-C_{10}) arylureido, $((C_6-C_{10})$ aryl) $_2$ ureido, (C_6-C_{10}) aryl (C_1-C_6) alkylureido, halo (C_1-C_6) alkylureido, $((C_1-C_6)$ alkyl) $((C_6-C_{10})$ aryl)ureido, $((C_1-C_6)$ alkyl) $_2$ ureido,

halo(C₁-C₆)alkylcarbonylureido, (halo(C₁-C₆)alkyl)((C₁-C₆)alkyl)ureido, ((C₁-C₆)alkoxycarbonyl(C₁-C₆)alkyl)ureido, glycnamido, (C₁-C₆)alkylglycnamido, aminocarbonylglycnamido, (C₁-C₆)alkoxy(C₁-C₆)alkylcarbonylglycnamido, (aminocarbonyl)((C₁-C₆)alkyl)glycnamido, ((C₁-C₆)alkoxycarbonyl(C₁-C₆)alkylcarbonyl)((C₁-C₆)alkyl)glycnamido, ((C₁-C₆)alkoxycarbonylamino(C₁-C₆)alkylcarbonyl)glycnamido, (C₆-C₁₀)arylcarbonylglycnamido, ((C₆-C₁₀)arylcarbonyl)((C₁-C₆)alkyl)glycnamido, ((C₆-C₁₀)aryl(C₁-C₆)alkylaminocarbonyl)glycnamido, ((C₆-C₁₀)aryl(C₁-C₆)alkylaminocarbonyl)((C₁-C₆)alkyl)glycnamido, (C₆-C₁₀)arylaminocarbonylglycnamido, ((C₆-C₁₀)arylaminocarbonyl)((C₁-C₆)alkyl)glycnamido, alaninamido, (C₁-C₆)alkylalaninamido, (C₂-C₉)heteroaryl, amino(C₂-C₉)heteroaryl, (C₁-C₆)alkylamino(C₂-C₉)heteroaryl, ((C₁-C₆)alkyl)₂amino(C₂-C₉)heteroaryl, (C₂-C₉)heteroaryloxy, (C₂-C₉)heterocycloalkyl, carboxy(C₁-C₆)alkoxy, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkoxy, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkoxy, (C₂-C₉)heteroaryl(C₁-C₆)alkoxy, carboxy(C₁-C₆)alkylamino(C₂-C₆)alkoxy, amino(C₂-C₆)alkoxy, (aminocarbonyl)(hydroxy)amino, (C₁-C₆)alkylamino(C₂-C₆)alkoxy, ((C₁-C₆)alkyl)₂amino(C₂-C₆)alkoxy, (C₁-C₆)alkylcarbonylamino(C₂-C₆)alkoxy, aminocarbonylamino(C₂-C₆)alkoxy, (C₁-C₆)alkylaminocarbonylamino(C₂-C₆)alkoxy, ((C₁-C₆)alkyl)₂aminocarbonylamino(C₂-C₆)alkoxy, amino(C₂-C₆)alkoxycarbonylamino, (C₁-C₆)alkylamino(C₂-C₆)alkoxycarbonylamino, ((C₁-C₆)alkyl)₂amino(C₂-C₆)alkoxycarbonylamino, (C₂-C₉)heteroarylaminocarbonylamino(C₂-C₆)alkoxy, barbituryl, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylaminocarbonyl-amino(C₁-C₆)alkylcarbonylamino where the (C₁-C₆)alkyl is optionally substituted with one or two groups selected from hydrogen, amino, hydroxyl, (C₁-C₆)alkoxy, carboxy, further substituted (C₂-C₉)heteroaryl, (C₆-C₁₀)aryl, (C₂-C₉)heterocycloalkyl, and cycloalkyl, or the two groups together make up a carbocycle; and R¹⁹carbonylamino where R¹⁹ is a nitrogen containing (C₂-C₉)heterocycloalkyl which is optionally substituted further with one or two groups selected from (C₁-C₆)alkyl, (C₂-C₆)alkoxy and hydroxy;

R⁹ is selected from the group consisting of hydrogen, (C₁-C₆)alkyl, (C₆-C₁₀)aryl, (C₆-C₁₀)aryl(C₁-C₆)alkyl, (C₁-C₆)alkylcarbonyl, (C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkylcarbonyl, (C₆-C₁₀)aryl(C₁-C₆)alkylcarbonyl(C₁-C₆)alkyl, aminocarbonyl, (C₁-C₆)alkylaminocarbonyl, ((C₁-C₆)alkyl)₂aminocarbonyl and (C₁-C₆)alkoxycarbonyl; and

R¹¹ and R¹² are each independently selected from the group consisting of hydrogen, (C₁-

C₆alkyl, (C₆-C₁₀)aryl, (C₆-C₁₀)aryl(C₁-C₆)alkyl, hydroxy, (C₁-C₆)alkoxy, hydroxy(C₁-C₆)alkyl, (C₁-C₆)alkoxy(C₁-C₆)alkyl, amino, (C₁-C₆)alkylamino, ((C₁-C₆)alkyl)₂amino, (C₁-C₆)alkylcarbonylamino, (C₃-C₈)cycloalkylcarbonylamino, (C₃-C₈)cycloalkyl(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkoxycarbonylamino, (C₁-C₆)alkylsulfonylamino, (C₆-C₁₀)arylcarbonylamino, (C₁-C₆)alkoxycarbonyl(C₁-C₆)alkylcarbonylamino, (C₆-C₁₀)aryl(C₁-C₆)alkylcarbonylamino, ((C₆-C₁₀)aryl(C₁-C₆)alkylcarbonyl)((C₁-C₆)alkyl)amino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkyl, (C₃-C₈)cycloalkylcarbonylamino(C₁-C₆)alkyl, (C₁-C₆)alkoxycarbonylamino(C₁-C₆)alkyl, (C₂-C₉)heterocycloalkylcarbonylamino(C₁-C₆)alkyl, (C₆-C₁₀)aryl(C₁-C₆)alkylcarbonylamino(C₁-C₆)alkyl, (C₂-C₉)heteroarylcarbonylamino(C₁-C₆)alkyl, (C₆-C₁₀)arylsulfonylamino, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkyl, aminocarbonylamino, (C₁-C₆)alkylaminocarbonylamino, halo(C₁-C₆)alkylaminocarbonylamino, ((C₁-C₆)alkyl)₂aminocarbonylamino, aminocarbonylamino(C₁-C₆)alkyl, (C₁-C₆)alkylaminocarbonylamino(C₁-C₆)alkyl, ((C₁-C₆)alkyl)₂aminocarbonylamino(C₁-C₆)alkyl, halo(C₁-C₆)alkylaminocarbonylamino(C₁-C₆)alkyl, amino(C₁-C₆)alkyl, (C₁-C₆)alkylamino(C₁-C₆)alkyl, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkyl, carboxy(C₁-C₆)alkyl, (C₁-C₆)alkoxycarbonyl(C₁-C₆)alkyl, aminocarbonyl(C₁-C₆)alkyl and (C₁-C₆)alkylaminocarbonyl(C₁-C₆)alkyl;

with the proviso that when R⁴ is phenyl or pyridyl, Q is (C₁-C₆)alkyl, q is 0 or 1, R⁵ can be selected from the group consisting of carboxy(C₁-C₆)alkylaminocarbonylamino, (C₂-C₉)heteroarylaminocarbonylamino, ((C₁-C₆)alkylamino)(C₆-C₁₀)aryl(C₁-C₆)alkyl, amino(C₁-C₆)alkoxycarbonylamino, (C₁-C₆)alkyl, halo(C₁-C₆)alkyl, aminocarbonyl, ureido(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylcarbonylamino, and (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylaminocarbonylamino.

2. (Previously Presented) A compound according to claim 1, wherein R¹ is hydrogen, halo, cyano, nitro, trifluoromethyl, trifluoromethoxy, (C₁-C₆)alkyl, hydroxy or (C₁-C₆)alkylcarbonyl.
3. (Previously Presented) A compound according to claim 1, wherein c is 1; X is C(O) or CH₂; d is 1; and Z is oxygen, NH, or CR¹¹R¹².

4. (Original) A compound according to claim 1, wherein R^4 is $(R^5)_f(C_6-C_{10})$ aryl or $(R^5)_f(C_2-C_9)$ heteroaryl, wherein f is 1 or 2.
5. (Currently Amended) A compound according to claim 1, wherein c is 1; X is $C(O)$; d is 1; and Z is oxygen or $CR^{11}R^{12}$; ~~W is nitrogen; and i, m and k are zero, zero and 2 respectively.~~
6. (Previously Presented) A compound according to claim 1, wherein R^4 is phenyl, Q is (C_1-C_6) alkyl, q is 0 or 1, and at least one R^5 is selected from: (C_2-C_9) heteroarylaminocarbonyl, (C_2-C_9) heteroarylcarbonylamino, (C_1-C_6) alkylsulfonylaminocarbonyl, aminosulfonylaminocarbonyl, carboxy (C_1-C_6) alkylcyanoguanidino, carboxy, (C_2-C_9) heteroaryl amino, (C_2-C_9) heteroarylsulfonyl, (C_2-C_9) heteroaryl, (C_2-C_9) heteroaryloxy, (C_2-C_9) heteroarylcarbonyl, (C_2-C_9) heteroaryl (C_1-C_6) alkylcarbonyl, carboxy (C_1-C_6) alkylaminocarbonylamino, (C_2-C_9) heteroarylaminocarbonylamino, carboxy (C_1-C_6) alkylcarbonylamino, (C_2-C_9) heteroaryl (C_1-C_6) alkylamino, carboxy (C_1-C_6) alkylaminocarbonyl, carboxy (C_1-C_6) alkylsulfonylamino, (C_2-C_9) heteroarylaminosulfonyl, carboxy (C_1-C_6) alkylsulfonyl, carboxy (C_1-C_6) alkylamino, carboxy (C_1-C_6) alkylcarbonyl, carboxy (C_1-C_6) alkoxy, carboxy (C_1-C_6) alkoxycarbonylamino, hydroxyaminocarbonyl, (C_1-C_6) alkylsulfonylaminocarbonyl (C_1-C_6) alkoxy, (C_2-C_9) heteroaryl (C_1-C_6) alkoxy, carboxy (C_1-C_6) alkylamino (C_2-C_6) alkoxy, (C_2-C_9) heteroaryl amino (C_2-C_6) alkoxy, amino (C_1-C_6) alkylcarbonyl, (C_1-C_6) alkylamino (C_1-C_6) alkylcarbonyl, $((C_1-C_6)alkyl)_2$ amino (C_1-C_6) alkylcarbonyl, amino (C_1-C_6) alkylcarbonylamino, (C_1-C_6) alkylamino (C_1-C_6) alkylcarbonylamino, $((C_1-C_6)alkyl)_2$ amino (C_1-C_6) alkylcarbonylamino, amino (C_1-C_6) alkylureido, (C_1-C_6) alkylamino (C_1-C_6) alkylureido, $((C_1-C_6)alkyl)_2$ amino (C_1-C_6) alkylureido, amino (C_1-C_6) alkylsulfonylamino, (C_1-C_6) alkylamino (C_1-C_6) alkylsulfonylamino, $((C_1-C_6)alkyl)_2$ amino (C_1-C_6) alkylsulfonylamino, amino (C_1-C_6) alkylsulfonyl, (C_1-C_6) alkylamino (C_1-C_6) alkylsulfonyl, $((C_1-C_6)alkyl)_2$ amino (C_1-C_6) alkylsulfonyl, amino (C_1-C_6) alkylcyanoguanidino, (C_1-C_6) alkylamino (C_1-C_6) alkylcyanoguanidino, $((C_1-C_6)alkyl)_2$ amino (C_1-C_6) alkylcyanoguanidino, amino (C_1-C_6) alkylaminosulfonyl, (C_1-C_6) alkylamino (C_1-C_6) alkylaminosulfonyl, $((C_1-C_6)alkyl)_2$ amino (C_1-C_6) alkylaminosulfonyl, $((C_1-C_6)alkylamino)(C_6-C_{10})$ aryl (C_1-C_6) alkyl, amino, amino (C_1-C_6) alkoxy, amino (C_1-C_6) alkoxycarbonylamino, (C_1-C_6) alkylamino, $((C_1-C_6)alkyl)_2$ amino, (C_6-C_{10}) arylamino,

(C₆-C₁₀)aryl(C₁-C₆)alkylamino, amino(C₁-C₆)alkylamino, (C₂-C₉)heterocycloalkylamino, (C₃-C₁₀)cycloalkyl(C₁-C₆)alkylamino, (amino(C₁-C₆)alkyl)aminocarbonyl, glycnamido, (C₁-C₆)alkylglycinamido, alaninamido, (C₁-C₆)alkylalaninamido, halo, (C₁-C₆)alkoxy, (C₁-C₆)alkyl, halo(C₁-C₆)alkyl, aminocarbonyl(C₁-C₆)alkylureido, (C₁-C₆)alkylcarbonyl, (C₁-C₆)alkylsulfonylamino, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkylaminocarbonyl, aminosulfonyl, aminocarbonyl, ureido(C₁-C₆)alkylaminocarbonyl, aminocarbonyl(C₁-C₆)alkylaminocarbonyl, aminocarbonyl(C₁-C₆)alkylcarbonylamino, ureido(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylaminocarbonylamino, ureido, halo(C₁-C₆)alkylsulfonylamino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylaminocarbonyl.

7. (Previously Presented) A compound according to claim 1, wherein R⁴ is pyridyl, Q is (C₁-C₆)alkyl, q is 0 or 1, and at least one R⁵ is selected from: (C₂-C₉)heteroarylaminocarbonyl, (C₂-C₉)heteroarylcarbonylamino, (C₁-C₆)alkylsulfonylamino, aminosulfonylamino, carboxy(C₁-C₆)alkylcyanoguanidino, carboxy, (C₂-C₉)heteroaryl, (C₂-C₉)heteroarylsulfonyl, (C₂-C₉)heteroaryl, (C₂-C₉)heteroaryloxy, (C₂-C₉)heteroarylcarbonyl, (C₂-C₉)heteroaryl(C₁-C₆)alkylcarbonyl, carboxy(C₁-C₆)alkylaminocarbonylamino, (C₂-C₉)heteroarylaminocarbonylamino, carboxy(C₁-C₆)alkylcarbonylamino, (C₂-C₉)heteroaryl(C₁-C₆)alkylamino, carboxy(C₁-C₆)alkylaminocarbonyl, carboxy(C₁-C₆)alkylsulfonylamino, (C₂-C₉)heteroarylaminosulfonyl, carboxy(C₁-C₆)alkylsulfonyl, carboxy(C₁-C₆)alkylamino, carboxy(C₁-C₆)alkylcarbonyl, carboxy(C₁-C₆)alkoxy, carboxy(C₁-C₆)alkoxycarbonylamino, hydroxyaminocarbonyl, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkoxy, (C₂-C₉)heteroaryl(C₁-C₆)alkoxy, carboxy(C₁-C₆)alkylamino(C₂-C₆)alkoxy, (C₂-C₉)heteroaryl(C₂-C₆)alkoxy, amino(C₁-C₆)alkylcarbonyl, (C₁-C₆)alkylamino(C₁-C₆)alkylcarbonyl, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylcarbonyl, amino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylamino(C₁-C₆)alkylcarbonylamino, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylcarbonylamino, amino(C₁-C₆)alkylureido, (C₁-C₆)alkylamino(C₁-C₆)alkylureido, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylureido, amino(C₁-C₆)alkylsulfonylamino, (C₁-C₆)alkylamino(C₁-C₆)alkylsulfonylamino, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylsulfonylamino, amino(C₁-C₆)alkylsulfonyl, (C₁-C₆)alkylamino(C₁-C₆)alkylsulfonyl, ((C₁-C₆)alkyl)₂amino(C₁-

PATENT
Attorney Docket No. PC11076A US

C₆)alkylsulfonyl, amino(C₁-C₆)alkylcyanoguanidino, (C₁-C₆)alkylamino(C₁-C₆)alkylcyanoguanidino, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylcyanoguanidino, amino(C₁-C₆)alkylaminosulfonyl, (C₁-C₆)alkylamino(C₁-C₆)alkylaminosulfonyl, ((C₁-C₆)alkyl)₂amino(C₁-C₆)alkylaminosulfonyl, ((C₁-C₆)alkylamino)(C₆-C₁₀)aryl(C₁-C₆)alkyl, amino, amino(C₁-C₆)alkoxy, amino(C₁-C₆)alkoxycarbonylamino, (C₁-C₆)alkylamino, ((C₁-C₆)alkyl)₂amino, (C₆-C₁₀)arylamino, (C₆-C₁₀)aryl(C₁-C₆)alkylamino, amino(C₁-C₆)alkylamino, (C₂-C₉)heterocycloalkylamino, (C₃-C₁₀)cycloalkyl(C₁-C₆)alkylamino, (amino(C₁-C₆)alkyl)aminocarbonyl, glycynamido, (C₁-C₆)alkylglycynamido, alaninamido, (C₁-C₆)alkylalaninamido, aminocarbonyl(C₁-C₆)alkylureido, (C₁-C₆)alkylcarbonyl, (C₁-C₆)alkylsulfonylamino, (C₁-C₆)alkylsulfonylamino(C₁-C₆)alkylaminocarbonyl, aminosulfonyl, aminocarbonyl, ureido(C₁-C₆)alkylaminocarbonyl, aminocarbonyl(C₁-C₆)alkylaminocarbonyl, aminocarbonyl(C₁-C₆)alkylcarbonylamino, ureido(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylcarbonylamino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylaminocarbonylamino, ureido, halo(C₁-C₆)alkylsulfonylamino, (C₁-C₆)alkylcarbonylamino(C₁-C₆)alkylaminocarbonyl.

8. (Previously Amended) Salts of a compound according to claim 1, where pharmaceutically acceptable counter-ions for acidic compounds are selected from alkali metal cations, alkaline earth metal cations ammonium or water-soluble amine addition salts, N-methylglucamine-(meglumine), the lower alkanolammonium and other base salts of pharmaceutically acceptable organic amines; and pharmaceutically acceptable salts selected from hydrochloride, hydrobromide, hydroiodide, nitrate, sulfate, bisulfate, phosphate, acid phosphate, acetate, lactate, citrate, acid citrate, tartrate, bitartrate, succinate, maleate, fumarate, gluconate, saccharate, benzoate, methanesulfonate, ethanesulfonate, benzenesulfonate, p-toluenesulfonate and pamoate salts.

Claims 9-14 (Cancelled)

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